



Engineering Technician III

Characteristics of Work

This is the supervisory-level occupational class for the engineering technician job series. This work requires strict compliance with set operating procedures, general supervision by higher-level technicians and/or professional engineers, and general decision making; duties performed are mainly in the functional areas of traffic control and safety research and development, roadway design, right-of-ways, testing, transportation planning, bridges, and field work. Incumbents in this class exercise supervision of subordinate incumbents in the completion of various projects.

Examples of Work

Examples of work performed in this classification include, but are not limited to, the following:

Inspects aggregate plants; inspects ready-mix plants and pre-stress plants; inspects and supervises asphalt paving, concrete paving, and bridge construction.

Tests reinforcing steel, casting and grates; conducts Los Angeles abrasion test; tests compressive strength of masonry specimen and EOS value of fitter cloth.

Maintains and administers computer test cost programs; codes for computers the more complex ROW projects; computes quantities for erosion control items.

Plans layout and details of complex bridge construction drawings; assists in developing sign layouts for complex sign projects.

Supervises subordinate engineering technicians and engineering aides.

Performs complex time delay studies; plots highly complex land descriptions and analyzes research project studies.

Assists in planning for purchase of sign and signal materials for stock and yield installation; checks and verifies various lists and plans.

Uses specialized research instruments such as the rolling pathometer, electric piezometer probe, and others; makes enlargements, reductions, and contact copies of maps, aerial photos, etc., using equipment of the photo lab.

Prepares a traffic control plan for a particular design project situation and drafts typical section sheets from established criteria and design data.

Updates and maintains statistical and historical records concerning the fiscal planning area such as mileage statistics, audit reports, and maintenance stats.

Performs related or similar duties as required or assigned.

Essential Functions

These essential functions include, but are not limited to, the following. Additional essential functions may be identified and included by the hiring agency.

1. Assists higher-level technicians on various design and/or construction projects.
2. Supervises subordinates.
3. Performs general office duties.

Minimum Qualifications

These minimum qualifications have been agreed upon by Subject Matter Experts (SME's) in this job class and are based upon a job analysis and the essential functions. However, if a candidate believes he/she is qualified for the job although he/she does not have the minimum qualifications set forth below, he/she may request special consideration through substitution of related education and experience, demonstrating the ability to perform the essential functions of positions. Any request to substitute related education or experience for minimum qualifications must be addressed to the State Personnel Board in writing, identifying the related education and experience which demonstrates the candidate's ability to perform all essential functions of the position.

Physical Requirements: These physical requirements are not exhaustive, and additional job related physical requirements may be added to these by individual agencies on an as needed basis. Corrective devices may be used to meet physical requirements.

Moderate Work: May frequently exert force equivalent to lifting up to approximately 25 pounds and/or occasionally exert force equivalent to lifting up to approximately 50 pounds.

Vision: Requires the ability to perceive the nature of objects by the eye.

Near Acuity: Clarity of vision at 20 inches or less.

Midrange: Clarity of vision at distances of more than 20 inches and less than 20 feet.

Far Acuity: Clarity of vision at 20 feet or more.

Field of Vision: Ability to observe an area up or down, left or right while eyes are fixed on a given point.

Depth Perception: Three-dimensional vision. Ability to judge distance and space relationships so as to see objects where and as they actually are.

Accommodation: Ability to adjust focus.

Motor Coordination: While performing the duties of this job the incumbent is regularly required to use hands to finger, handle or feel objects, tools, or controls; reach with hands and arms; and stoop, kneel, crouch, or bend. The incumbent is frequently required to stand; and walk. The incumbent is occasionally required to climb or balance.

Speaking/Hearing: Ability to give and receive information through speaking and listening skills.

Experience/Educational Requirements:

Education:

Completion of four (4) years (one hundred twenty (120) semester hours) of college from an accredited college or university, thirty (30) hours of which shall have been in an engineering-related field.

OR

Education:

Graduation from a standard four-year high school or equivalent (GED).

AND

Experience:

Four (4) years of experience in work directly related to the above-described duties.

Substitution Statement:

Directly related education and directly related experience may be substituted on an equal basis.

Documentation Required:

Applicant must attach a valid copy of his/her transcript or other evidence to verify completion of required coursework, where applicable.

Interview Requirements

Any candidate who is called to an agency for an interview must notify the interviewing agency in writing of any reasonable accommodation needed prior to the date of the interview.